

Name: _____

at1110paper__practice__test (v37)

1. Expand the following expression into standard form.

$$(7x - 8)(3x - 4)$$

$$21x^2 - 28x - 24x + 32$$

$$21x^2 - 52x + 32$$

2. Solve the equation.

$$(5x - 4)(8x + 3) = 0$$

$$x = \frac{4}{5} \quad x = \frac{-3}{8}$$

3. Expand the following expression into standard form.

$$(9x + 5)(9x - 5)$$

$$81x^2 - 45x + 45x - 25$$

$$81x^2 - 25$$

4. Expand the following expression into standard form.

$$(7x + 2)^2$$

$$49x^2 + 14x + 14x + 4$$

$$49x^2 + 28x + 4$$

5. Factor the expression.

$$x^2 + x - 42$$

$$(x - 6)(x + 7)$$

6. Factor the expression.

$$64x^2 - 49$$

$$(8x - 7)(8x + 7)$$

7. Solve the equation with factoring by grouping.

$$8x^2 - 20x + 6x - 15 = 0$$

$$(4x + 3)(2x - 5) = 0$$

$$x = \frac{-3}{4} \quad x = \frac{5}{2}$$

8. Solve the equation.

$$7x^2 + 2x + 6 = 2x^2 - 5x + 4$$

$$5x^2 + 7x + 2 = 0$$

$$(5x + 2)(x + 1) = 0$$

$$x = \frac{-2}{5} \quad x = -1$$